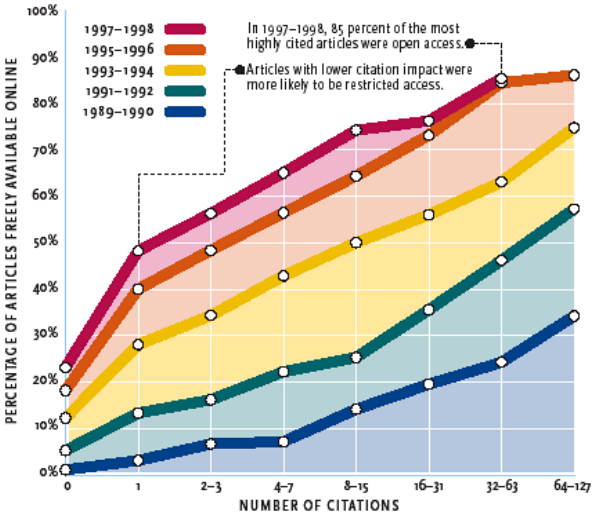
Open Access Information for ICOC/CIRM IP Task Force
4 Sets of Evidence[1]

University of California Academic Council Special Committee on Scholarly Communication[2]
And
University of California Office of Scholarly Communication[3]

August 28, 2006

1. Research confirming the impact advantage of providing open access to research publications[4]

Lawrence, Steve. Online or Invisible? *Nature*, Vol. 411, No. 6837, 2001. pp. 521.
"The results are dramatic, showing a clear correlation between the number of times an article is cited and the probability that the article is online."



Mueller, P. S., Murali, N. S., Cha, S. S., Erwin, P. J. and Ghosh, A. K. The effect of online status on the impact factors of general internal medicine journals.
Netherlands Journal of Medicine, 64 (2): 39-44, February 2006.
"becoming available online as FUTON (full text on the Net) is associated with a significant increase in journal impact factor."

Eysenbach, G. Citation Advantage of Open Access Articles. *PLoS Biology*, Volume 4, Issue 5, May 2006.
"[there is] strong evidence that, even in a journal that is widely available in research libraries, OA articles are more immediately recognized and cited by peers than non-OA articles published in the same journal. OA is likely to benefit science by accelerating dissemination and uptake of research findings."

---

[1] The information herein was assembled from public sources and is thought to be accurate as of this writing.
[2] http://www.universityofcalifornia.edu/senate/committees/scsc/
[3] http://osc.universityofcalifornia.edu/
[4] Additional studies, plus further details on and links to these studies, is available at http://opcit.eprints.org/oacitation-biblio.html

Eysenbach, G. The Open Access Advantage, *Journal of Medical Internet Research*, 2006;8(2):e8.
"follow up data from [articles examined in Eysebach, 2006 above] suggest that the citation gap between open access and non-open access papers continues to widen. I conclude with the observation that the "open access advantage" has at least three components: (1) a citation count advantage (as a metric for knowledge uptake within the scientific community), (2) an end user uptake advantage, and (3) a cross-discipline fertilization advantage."

Hajjem, C., Harnad, S. and Gingras, Y. Ten-Year Cross-Disciplinary Comparison of the Growth of Open Access and How it Increases Research Citation Impact. *IEEE Data Engineering Bulletin*, Vol. 28 No. 4, December 2005.
"We have since replicated [the Lawrence citation advantage] effect in physics. To further test its cross-disciplinary generality, we used 1,307,038 articles published across 12 years (1992-2003) in 10 disciplines (Biology, Psychology, Sociology, Health, Political Science, Economics, Education, Law, Business, Management). Comparing OA and [non]OA articles in the same journal/year, OA articles have consistently more citations, the advantage varying from 25%-250% by discipline and year."

2. Research funders that support open access

All agencies below encourage open access to publications resulting from their funding by allowing the use of grants to pay "article processing fees" allowing free, open access to a publisher's version of an article. Those in green require open access as a condition of funding; those in blue "strongly encourage" open access.

Biotechnology and Biological Sciences Research Council (UK)
Canadian Institutes of Health Research (Canada) *
Centre National de la Recherche Scientifique (France)
Consejo Superior de Investigaciones Cientificas (Spain)
Consiglio Nazionale delle Ricerche (Italy)
Council for the Central Laboratory of the Research Councils (CCLRC)
Danmarks Grundforskningsfond (Denmark)
Deutsche Forschungsgemeinschaft (Germany) *
Economic and Social Research Council (UK)
Fondazione Telethon (Italy)
Fonds zur Forderung der wissenschaftlichen Forschung (Austria)
Fonds voor Wetenschappelijk Onderzoek (Belgium)
Health Research Board (Ireland)
Howard Hughes Medical Institute (US)
International Human Frontier Science Program Organization (International)
Israel Science Foundation (Israel)
Medical Research Council (UK)
National Health Service (UK)
National Institutes of Health (US) *
National Science Foundation (US) *
Nederlandse Organisatie voor Wetenschappelijk Onderzoek (Netherlands)
Rockefeller Foundation (US)
South African Medical Research Council (South Africa)
Suomen Akatemia (Finland)
Swiss National Science Foundation (Switzerland)
Swedish Research Council (Sweden)
Wellcome Trust (UK)

* considering an open access mandate

3. Relevant journals available to stem cell research authors who desire or are required to make their articles open access.

Journals that by default allow or provide open access to an article

Cell (after 12 months; publisher's version)
Cell (immediately; author's version)
Development (after 6 months; publisher's version)
Developmental Biology (immediately; author's version)
Developmental Cell (after 12 months; publisher's version)
Developmental Cell (immediately; author's version)
Genes & Development (after 6 months; publisher's version)
Genome Research (after 6 months; publisher's version)
Nature (after 6 months; author's version)
Nature Cell Biology (after 6 months; author's version)
Nature Genetics (after 6 months; author's version)
Nature Neuroscience (after 6 months; author's version)
Neuron (immediately; author's version)
PNAS (immediately; author's version)
Science (immediately; author's version)
Stem Cells (after 12 months; publisher's version)

Journals that allow immediate open access to articles if a fee[5] is paid:

American Journal of Medical Genetics Part A
American Journal of Medical Genetics Part B
Development
Genes and Development
Genome Research
PLOS Biology
PLOS Medicine
PNAS

Publishers that allow immediate open access to articles if a fee is paid:

Blackwell
Elsevier (some journals)
Oxford University Press (most journals)
Royal Society Press
Springer
Wiley

4. Sample open access requirement (with "opt-out" protection)

UK Medical Research Council Guidance on open and unrestricted access to published research[6] (emphasis added)

This guidance is based upon that of the Research Councils UK.

1. From 1 October 2006, **the MRC will require that,** for new funding awards, electronic copies of **any research papers that have been accepted for publication in a peer-reviewed journal, and are supported in whole or in part by MRC-funding are deposited at the**

[5] Business models that are based on this approach are collectively known as the "producer pays" model, with fees that are variously named as a "publication fee," an "article processing fee," or an "open access fee."
[6] http://www.mrc.ac.uk/open_access

earliest opportunity – and certainly within six months - in PubMed Central (PMC). When UK PubMed Central (UKPMC) is established*, the requirement will be to deposit papers in UKPMC.

2. This applies to all award holders, including MRC staff.
3. Deposition of a research paper into PMC (or UKPMC) does not prevent authors from also depositing a copy in their own institutional or another subject-based repository should they choose to do so or be required to do so by their employing institution.
4. The MRC also encourages, but does not formally oblige, all award-holders and MRC staff to ensure deposit of articles arising from grants awarded as a result of applications before 1 October 2006.
5. **The MRC strongly encourages authors to publish in journals that allow them (or their institutions) to retain ownership of the copyright. [Requests for "Author pays" charges associated with publishing may be included in applications for MRC funding].**
6. If author/institution-ownership of copyright is not permitted by the publisher, authors should publish in journals that permit deposition of the published paper in PMC/UKPMC within six months of publication. **If a researcher wishes to publish a paper in a journal that is unwilling to agree either to author/institution-ownership of copyright, or to deposition in PMC/UKPMC within six months, the MRC may, in very exceptional cases, grant permission for authors to submit the paper for publication in such a journal. This position will be reviewed in 2008.**
7. The MRC will work with publishers to put in place mechanisms for publishers to deposit publications directly, on behalf of authors, where this is possible.
8. The MRC's grant conditions will be amended to reflect the above changes.
9. From 1 January 2006, all applicants submitting funding proposals to the MRC are expected to include a statement explaining their strategy for data preservation and sharing. MRC Data Sharing policy indicates that, where possible, published results should provide links to the associated data.